

CLAIMS

WHAT IS CLAIMED IS:

1. A bladder supply and eversion apparatus for use in the installation of a flexible cured in place liner in an existing pipeline, comprising:
 - 5 a pressurized bladder canister having a bladder outlet;
 - a tubular member having an inlet and an outlet, the inlet coupled to the bladder outlet of the canister; and
 - an eversion elbow having an inlet coupled to the canister and an outlet adapted to secure the bladder thereto, and a fluid inlet port;
- 10 whereby the assembled bladder supply and eversion apparatus can be positioned at one end of the liner for eversion of the bladder by induction of pressurized fluid to inflate the liner.
2. The eversion apparatus of claim 1, wherein the bladder canister includes an inlet port for introduction of eversion fluid.
- 15 3. The eversion apparatus of claim 1, wherein the eversion fluid inlet port is an air inlet port.
4. The eversion apparatus of claim 1, wherein the fluid inlet port on the elbow is an air/steam inlet port.
5. The eversion apparatus of claim 1, wherein the canister has an air inlet
20 port and the fluid port on the elbow is an air/steam inlet port.
6. The eversion apparatus of claim 1, further including a selectively actuable valve capable of allowing an inflation bladder to pass therethrough and capable of forming a seal to isolate the canister from the interior of the everting bladder, the valve mounted between the canister and the eversion elbow.
- 25 7. The eversion apparatus of claim 6, wherein the valve is selectively actuable by fluid pressure.

8. The eversion apparatus of claim 6, wherein the valve is a sphincter valve.

9. The eversion apparatus of claim 1, wherein the canister includes a staging spool for storing inflation bladder.

5 10. The eversion apparatus of claim 1, wherein the tubular member is a pressurized steam hose.

11. The eversion apparatus of claim 9, further including a motor engaged to the spool for winding bladder thereon.

12. An easement unit for trenchless rehabilitation of an existing pipeline by
10 inserting a flexible resin impregnated liner in to an existing pipeline and everting an inflation bladder within the inserted liner to conform the liner to the existing pipeline, comprising:

a displaceable frame; and

15 a pressure bladder canister having a bladder outlet for holding a supply spool of a length of flexible inflation bladder disposed on the spool for removal through the outlet, mounted on the frame.

13. The easement unit of claim 12, wherein the bladder canister includes an inlet for pressurized eversion fluid.

14. The easement unit of claim 13, wherein the inlet port on the canister is
20 an air inlet port.

15. The easement unit of claim 12, further including a motor coupled to the staging spool for winding bladder on the spool.

16. A bladder supply and eversion apparatus for use in the installation of a flexible cured in place liner in an existing pipeline, comprising:

25 a pressurized bladder canister having a bladder outlet;

a tubular member having an inlet and an outlet, the inlet coupled to the bladder outlet of the canister;

a selectively actuatable valve capable of allowing an inflation bladder to pass therethrough and capable of forming a seal to isolate the canister from the interior of the everting bladder, the valve mounted at the outlet opening of the tubular member; and

5 an eversion elbow having an inlet coupled to the valve and an outlet adapted to secure the bladder thereto, and a fluid inlet port;

whereby the assembled bladder supply and eversion apparatus can be positioned at one end of the liner for eversion of the bladder by induction of pressurized fluid to inflate the liner.

10 17. The eversion apparatus of claim 16, wherein the bladder canister includes an inlet port for introduction of eversion fluid.

18. The eversion apparatus of claim 16, wherein the eversion fluid inlet port is an air inlet port.

15 19. The eversion apparatus of claim 16, wherein the fluid inlet port on the elbow is an air/steam inlet port.

20. The eversion apparatus of claim 16, wherein the canister has an air inlet port and the fluid port on the elbow is an air/steam inlet port.

21. The eversion apparatus of claim 16, wherein the valve is selectively actuatable by fluid pressure.

20 22. The eversion apparatus of claim 17, wherein the valve is a sphincter valve.

23. The eversion apparatus of claim 16, wherein the canister includes a staging spool for storing inflation bladder.

25 24. The eversion apparatus of claim 16, wherein the tubular member is a pressurized steam hose.

25. The eversion apparatus of claim 23, further including a motor engaged to the spool for winding bladder thereon.

26. An easement unit for trenchless rehabilitation of an existing pipeline by inserting a flexible resin impregnated liner in to an existing pipeline and everting an inflation bladder within the inserted liner to conform the liner to the existing pipeline, comprising:

5 a displaceable frame; and

a pressure bladder canister having a bladder outlet for holding a supply spool of a length of flexible inflation bladder disposed on the spool for removal through the outlet, mounted on the frame.

27. The easement unit of claim 26, wherein the bladder canister includes an
10 inlet for pressurized eversion fluid.

28. The easement unit of claim 27, wherein the inlet port on the canister is an air inlet port.

29. The easement unit of claim 26, further including a motor coupled to the staging spool for winding bladder on the spool.